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DATE MAILED: 04/30/2009

#### NOTICE OF ALLOWANCE AND FEE(S) DUE

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22434	7590	04/30/2009		[	EXAMINER			
Veaver Austin Villeneuve & Sampson LLP 2.O. BOX 70250		_	FAROUL, FARAH					
		ſ	ART UNIT	PAPER NUMBER				
DAKLAND	CA 94612-0	)250						

 APPLICATION NO.
 FILING DATE
 HIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 10/632,704
 07/31/2003
 Douglas McLaggan
 CISCP239/240201
 3626

TITLE OF INVENTION: DISTRIBUTING AND BALANCING TRAFFIC FLOW IN A VIRTUAL GATEWAY

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/30/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE BEE and DIRLICATION BEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	of transmitting the 1336 ig the Patent, advance of herwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees wil pondence address; a	l be mailed and/or (b) in	to the current dicating a sepa	correspondence address as rate "FEE ADDRESS" for
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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	/	ATTORNEY:	DOCKET NO.	CONFIRMATION NO.
10/632,704	07/31/2003		Douglas McLaggan		CISCP329/240201		
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APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOT	'AL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	07/30/2009
EXAM		ART UNIT	CLASS-SUBCLASS				
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PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSIG	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee detion of this form is NO	THE PATENT (print or typ data will appear on the p T a substitute for filing an (B) RESIDENCE: (CITY inted on the patent):	atent. If an assignee assignment. and STATE OR CO	OUNTRY)		
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Publication Fee (N	vo small entity discount p	permitted)	Payment by credit car	d. Form PTO-2038 i	is attached.		
Advance Order -	# of Copies		The Director is hereby overpayment, to Depo	authorized to charge sit Account Number	the require	d fee(s), any dei (enclose ar	iciency, or credit any extra copy of this form).
5. Change in Entity Sta	tus (from status indicate is SMALL ENTITY statu		☐ b. Applicant is no lon	ger claiming SMALL	ENTITY s	tatus. See 37 CF	R 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regist	ered attorne	y or agent; or th	e assignee or other party in
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/632,704 07/31/2003		Douglas McLaggan	CISCP329/240201	3626	
22434 75	590 04/30/2009		EXAMINER		
Weaver Austin V	illeneuve & Sampso	FAROUL, FARAH			
P.O. BOX 70250		ART UNIT	PAPER NUMBER		
OAKLAND, CA 9	4612-0250		2416		
		DATE MAIL ED: 04/30/2009			

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 774 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 774 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Application No. Applicant(s) 10/632,704 MCLAGGAN ET AL. Notice of Allowability Examiner Art Unit FARAH FAROUI 2416 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to the amendment filed on March 9, 2009. The allowed claim(s) is/are 1-7, 9-21, 23-27, 29-36, 38-53, renumbered 1-49, respectively. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) $\square$ All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. T Examiner's Amendment/Comment Paper No./Mail Date 03/09/2009 ☐ Examiner's Comment Regarding Requirement for Deposit. 8. X Examiner's Statement of Reasons for Allowance of Biological Material Other .

/Farah Faroul/ Examiner, Art Unit 2416 Application/Control Number: 10/632,704 Page 2

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#### DETAILED ACTION

 The following Office Action is based on the amendment filed on March 9, 2009, having claims 1-7, 9-21, 22-27, 29-36, 38-53 (claims 8, 22, 28 and 37 having been cancelled and claims 52-53 having been added).

# Response to Arguments

Applicant's arguments, see pages 15-20, filed on March 9, 2009, with respect to
 1-7, 9-21, 22-27, 29-36, 38-53 have been fully considered and are persuasive. The rejection(s) of 1-7, 9-21, 22-27, 29-36, and 38-53 has been withdrawn.

### Allowable Subject Matter

- Claims 1-7, 9-21, 22-27, 29-36, 38-53 are allowed.
- 4. The following is an examiner's statement of reasons for allowance:

For claims 1-9, 44-47, 50 and 52, the prior art fails to teach or render obvious the combination of:

measuring the traffic flow for each of the assigned forwarding addresses; and adjusting the traffic flow by changing allocation of the forwarding addresses based upon the measured traffic flow:

wherein the load-sharing redundancy group provides failover services in the event that one of the gateway devices ceases operation:

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wherein the first gateway device actively forwards packets addressed to the first plurality of forwarding addresses and the second gateway device actively forwards packets addressed to the second plurality of forwarding addresses

For claims 10-14, 48, 51 and 53, the prior art fails to teach or render obvious a combination of:

measuring the traffic flow to each forwarding address;

adjusting the measured traffic flow by changing allocation of the forwarding addresses based upon the measured traffic flow;

wherein the load-sharing redundancy group provides failover services in the event that one of the gateway devices ceases operation

For claims 15-21 and 23, the prior art fails to teach a combination or render obvious the combination of:

measuring the traffic flow for each of the assigned forwarding addresses; and adjusting the traffic flow by changing allocation of the forwarding addresses based upon the measured traffic flow;

wherein the load-sharing redundancy group provides failover services in the event that one of the gateway devices ceases operation;

wherein the first gateway device actively forwards packets and the second gateway device actively forwards packets simultaneously with the first gateway device.

For claims 24-27 and 29, the prior art fails to teach or render obvious the combination of:

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means for measuring the traffic flow for each of the assigned forwarding addresses: and

means for adjusting the traffic flow by changing allocation of the forwarding addresses based upon the measured traffic flow:

wherein the load-sharing redundancy group provides failover services in the event that one of the gateway devices ceases operation,

wherein the first gateway actively forwards packets simultaneously with the second gateway device, and the second gateway device is actively forwards packets simultaneously with the first gateway device

For claims 30-38 and 49, the prior art fails to teach or render obvious the combination of:

measure the traffic flow for each of the assigned forwarding addresses in the primary gateway device and the second gateway device; and

adjust the traffic flow by changing allocation of the forwarding addresses;

wherein the load-sharing redundancy group provides failover services in the event that one of the gateway devices ceases operation:

wherein the first gateway device actively forwards packets simultaneously with the second gateway device, and the second gateway device is actively forwards packets simultaneously with the first gateway device.

For claims 39-43, the prior art fails to teach or render obvious the combination of: measure the traffic flow to each forwarding address; and

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adjust the measured traffic flow by changing allocation of the forwarding addresses:

wherein the load-sharing redundancy group provides failover services in the event that one of the gateway devices ceases operation;

wherein both the first gateway device and the second gateway device forward packets at a given point in time

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to FARAH FAROUL whose telephone number is (571)270-1421. The examiner can normally be reached on Monday - Friday 7:30 AM - 5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chi H Pham/ Supervisory Patent Examiner, Art Unit 2416 4/26/09

/Farah Faroul/ Examiner, Art Unit 2416